This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claim 1 (Previously presented): A replication conditional adenoviral vector comprising a left ITR, an E1a transcription unit and at least one insulating sequence, wherein said at least one insulating sequence is isolated from its genetic source and inserted 5' to the transcription initiation site of said E1a transcription unit and 3' to said left ITR and the adenoviral packaging signal.

Claim 2-3 (Canceled)

Claim 4 (Original): The viral vector of Claim 1, wherein said insulating sequence is a termination signal sequence.

Claim 5 (Original): The viral vector of Claim 4, wherein the termination signal sequence is a polyadenylation signal sequence.

Claim 6 (Original): The viral vector of Claim 5, wherein the polyadenylation signal sequence is the SV40 late polyadenylation signal sequence.

Claim 7 (Original): The viral vector of Claim 5, wherein the polyadenylation signal sequence is the SV40 early polyadenylation signal sequence.

Claim 8 (Original): The viral vector of Claim 1, further comprising a therapeutic gene.

Claim 9 (Original): A viral vector particle comprising the viral vector of Claim 1.

Claim 10 (Original): A eukaryotic cell transfected with the viral vector particle of Claim 9.

Claim 11 (Previously presented): The vector of Claim 1, wherein the transcription unit of said adenoviral vector is operably linked to a tissue-specific transcriptional regulatory sequence and wherein said vector selectively replicates in tumor cells.

Claims 12-13 (Canceled)

Claim 14 (Previously presented): The adenoviral vector of Claim 11, wherein the sequence located between -141 and -305 relative to the E1a transcription initiation site at +1 has been removed.

Claim 15 (Previously presented): The adenoviral vector of Claim 25, wherein said insulating sequence is a termination signal sequence.

Claim 16 (Previously presented): The adenoviral vector of Claim 15, wherein said termination signal sequence is a polyadenylation signal sequence.

Claim 17 (Previously presented): The adenoviral vector of Claim 16, wherein said polyadenylation signal sequence is the SV40 late polyadenylation signal sequence.

Claim 18 (Previously presented): The adenoviral vector of Claim 17, wherein said polyadenylation signal sequence is the SV40 early polyadenylation signal sequence.

Claims 19-23 (Canceled)

Claim 24 (Previously presented): The adenoviral vector of Claim 11, wherein said tissue-specific transcriptional regulatory sequence is a promoter or an enhancer.

Claim 25 (Original) The adenoviral vector of Claim 24, wherein said promoter is selected from the group consisting of E2F, CEA, MUC1/DF3, alpha-fetoprotein, erb-B2, surfactant, tyrosinase, PSA, TK, p21, hTERT, hKLK2, probasin and cyclin gene derived promoters.

Claim 26 (Original): The adenoviral vector of Claim 24, wherein said enhancer is selected from the group consisting of DF3, breast cancer-specific enhancer, viral enhancers, and steroid receptor enhancers.

Claim 27 (Original): The adenoviral vector of Claim 11, further comprising a deletion in the E3 region.

Claim 28 (Original): The adenoviral vector of Claim 11, further comprising a therapeutic gene.

Claim 29 (Original): An adenoviral vector particle comprising the adenoviral vector of Claim 11.

Claim 30 (Original): A eukaryotic cell transfected with the adenoviral vector particle of Claim 29.

Claim 31 (Withdrawn): A method of reducing the transcription level of a transcription unit in a viral vector caused by an interfering genetic element which displays enhancer or promoter activity in relation to said transcription unit, comprising the steps of identifying a suitable insulating sequence and inserting said insulating sequence into said viral vector 5' to the transcription initiation site of said transcription unit.

Claim 32 (Withdrawn): The method of Claim 31, wherein said insulating sequence is located no more than 3000 nucleotides 5' to the transcription initiation site of said transcription unit.

Claim 33 (Withdrawn): The method of Claim 31, wherein said insulating sequence is a termination signal sequence.

Claim 34 (Withdrawn): The method of Claim 33, wherein the termination signal sequence is a polyadenylation signal sequence.

Claim 35 (Withdrawn): The method of Claim 34, wherein the polyadenylation signal sequence is the SV40 late polyadenylation signal sequence.

Claim 36 (Withdrawn): The method of Claim 34, wherein the polyadenylation signal sequence is the SV40 early polyadenylation signal sequence.

Claim 37 (Withdrawn): The method of Claim 31, wherein the vector construct further comprises a therapeutic gene.

Claim 38 (Withdrawn): The adenoviral vector of Claim 20 further comprising a therapeutic gene.

Claim 39 (Withdrawn): The adenoviral vector of Claim 38, wherein said therapeutic gene is a cytokine.

Claim 40 (Withdrawn): The adenoviral vector of Claim 39, wherein said cytokine is GM-CSF.

Claim 41 (Previously presented): The replication conditional adenoviral vector of Claim 8, wherein said therapeutic gene is a cytokine.

Claim 42 (Previously presented): The replication conditional adenoviral vector of Claim 8, wherein said cytokine is GM-CSF.

Claim 43 (Previously presented): The replication conditional adenoviral vector of Claim 28, wherein said therapeutic gene is a cytokine.

Claim 44 (Previously presented): The replication conditional adenoviral vector of Claim 28, wherein said cytokine is GM-CSF.

Claim 45 (Previously presented): The replication conditional adenoviral vector of Claim 25, wherein said promoter is an E2F promoter.

Claim 46 (Previously presented): The replication conditional adenoviral vector of Claim 25, wherein said promoter is an hTERT promoter.

REMARKS

Claims 1-4, 11, 14-18, 24-30 and 41-46 are allowed. The description in the specification for Figures 3A-C has been amended herein to be consistent with the drawings. Applicant would this correction to be entered before the patent is printed.

CONCLUSION

If any issues remain which the Examiner feels may be best resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact Applicants counsel, Linda R. Judge at (415) 836-2586.

Respectfully submitted,

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